

REMARKS

Applicant thanks the Examiner for the telephonic interview with the undersigned representative on September 15, 2005. Applicant's Representative explained differences between the claimed invention and the Dumesny reference, for example, the "graphical user interface element" of claims 1, 10, and 30, and the "rotation button" of Dumesny.

Claims 1-33 were considered in the Office action dated July 22, 2005. All pending claims stand as rejected. Independent claims 1, 10, and 30 stand as rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Publication No. 2002/0154132 A1 (**Dumesny**); and independent claim 23 stands as rejected under 35 U.S.C. 103(a) as being unpatentable over **Dumesny** in view of U.S. Patent No. 5,371,778 (**Yanof**).

The dependent claims stand as rejected as being unpatentable over **Dumesny** alone, or over **Dumesny** in view of one or more of U.S. Patent No. 6,707,458 B1 (**Leather**), U.S. Patent No. 5,371,778 (**Yanof**), U.S. Patent No. 5,461,709 (**Brown**); and U.S. Patent No. 6,822,635 B2 (**Shahoian**).

No amendments of the existing claims are made herein. Without conceding to any rejections of the Office action, Applicants introduce new dependent claims 34-38 to even further distinguish claim 1 from the cited art. The new claims are supported in the application as originally filed, for example, on page 42 at paragraph [0136]:

The widget offers a graphical representation of its position, scale, and orientation that relate to a position, scale, and orientation of the mapped texture.

The new claims are also supported in Figures 18A through 26C, and in the descriptions thereof. No new matter is added. Claims 1-38 are pending following entry of this Response.

Dependent claims 34-38 further distinguish the invention of claim 1 over **Dumesny**

As discussed below and as discussed in the telephonic interview on September 15, 2005, Applicant traverses the rejection of claim 1. However, Applicant presents dependent claims 34-38 in order to even further distinguish the invention of claim 1 over **Dumesny**, and the other cited art.

Claim 34 recites a GUI element for adjusting mapped texture, where the element is graphically represented in three-dimensional object space with a position, a scale, and/or an orientation that relate(s) to a position, a scale and/or an orientation of the mapped texture. None of the cited art teach any of these features, much less a combination of two or more of them, as recited in claims 35 and 36.

For example, the widget (GUI element) pictured in Figures 21A-21C has a position (in object space) that relates to the position of mapped texture. For example, a user may change the position of the widget by "dragging" the appropriate active location of the widget across the

surface of the virtual object, thereby shifting the adjusted texture within the user-defined region on the surface of the object.

As pictured in Figures 23A-23C, the exemplary widget also has a scale that relates to the scale of the mapped texture. For example, a user may lengthen an axis of the widget by adjusting the appropriate active location directly in object space, thereby increasing the scale of the tiles in the mapped texture.

Furthermore, as pictured and described in Figures 26A-26C, the exemplary widget also has an orientation that relates to the orientation of the mapped texture. For example, a user may rotate an axis of the widget by adjusting the appropriate active location directly in object space, thereby rotating the mapped texture.

Claim 37 recites a GUI element for adjusting mapped texture, where the element is rendered in object space and has a plurality of active locations for adjusting mapped texture. Furthermore, claim 38 recites the GUI element of claim 37, wherein at least two of the active locations perform different functions. Original claims 3 and 4 detail different functions that can be performed using the plurality of active locations on the GUI element. None of the cited art teach any of these features.

Each of Applicant's independent claims 1, 10, and 30, and claims depending therefrom, are patentable over **Dumesny**.

Applicant traverses the rejections of the Office action, and Applicant contends each of independent claims 1, 10, and 30 is patentable over **Dumesny** for any of the reasons summarized as follows:

- The “rotation button” as related in paragraph [0056] of **Dumesny** is not a graphical user interface (GUI) element “rendered in three-dimensional object space,” as is the GUI element recited in each of claims 1, 10, and 30.
- **Dumesny** does not suggest combining the rotation button described in paragraph [0056] with the “other embodiments” of paragraph [0074], and **Dumesny** further does not suggest altering the rotation button such that it is rendered in three-dimensional object space.
- Even if the “rotation button” in paragraph [0056] and the “adjusting of texture objects” of paragraph [0074] in **Dumesny** could be combined, the combination would neither explicitly nor inherently yield a GUI element rendered in three-dimensional object space, as recited in each of Applicant's claims 1, 10, and 30.
- Even if it could be argued that paragraph [0074] of **Dumesny** relates to a GUI element in three-dimensional object space (Applicant contends it does not), the subject matter of paragraph [0074] is merely conjectural; **Dumesny** does not enable one of ordinary skill in the art to carry out the speculative embodiments of paragraph [0074].

These are discussed in more detail below.

None of the cited references, either alone or in combination, teach or suggest rendering a GUI element in three-dimensional object space. As described in the application, the fact that the GUI element is rendered in three-dimensional object space enhances user interactivity and permits intuitive usage of the GUI element to adjust mapped texture within a user-defined region on the surface of a 3D virtual object (see, for example, paragraph [0011] on page 3 of the present application).

Dumesny presents an interactive GUI for manipulating a texture mapping (Figures 9A to 17J and paragraphs [0044] to [0073]). The GUI of **Dumesny** is in the form of a window with two regions – an object space region on the right and a texture space region on the left. The object space region on the right is a preview window that shows the result of a texture manipulation made by a user within the two-dimensional texture space region on the left (paragraphs [0044] and [0049] on page 4).

Applicant submits that it is well settled that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The Office action alleges, starting on page 2 and bridging onto page 3, the following:

Dumesny et al. further discloses the user interface comprising of tool buttons, allowing for a user to modify the texture mapping using various techniques, these techniques include translation, rotation, and scaling (see paragraph 48, 51 and 56 along with Figures 11a-b, 13a-b and 15a-b. *Dumesny et al.* specifically discloses a “rotation button” for rotating the texture (see paragraph 56, lines 1-4 and #159 of Figures 15a-b). *Dumesny et al.* also discloses an alternate embodiment of implementing the texture mapping and 3D graphical object windows together thereby adjusting texture objects within the 3D space itself (see paragraph 74). Therefore, the combination of the rotation button and adjusting of texture objects within 3D object space of *Dumesny et al.* is functionally equivalent to the user GUI element rendered in 3D object space [emphasis added].

However, the “rotation button” described in **Dumesny** is not a GUI element rendered in three-dimensional object space. For example, in paragraph [0056] of **Dumesny**, the “rotation button” is in “the Texture Applicator window 90” and is neither in “the “texture space region 92” nor in “the object space region 91.” FIG. 15A of **Dumesny** shows the “rotation button 159” outside both the “texture space region” and “object space region.” Applicant’s independent claims cite a GUI element rendered in three-dimensional object space, and **Dumesny** fails to set forth a GUI element rendered in three-dimensional object space.

Further, Applicant submits that it is well settled that in order to anticipate, the reference must clearly and unequivocally disclose the claimed invention or direct those skilled in the art to the invention without any need for picking, choosing, and combining various disclosures not directly related to each other by the teaching of the cited reference. *In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524 526 (CCPA 1972). There is no suggestion in **Dumesny** to combine the “rotation button” with the embodiment mentioned in paragraph [0074] of **Dumesny**. Specifically,

there is no suggestion in **Dumesny** to render the “rotation button” in three-dimensional object space, and there is no perceivable benefit for doing so. **Dumesny** fails to direct or even suggest combining the “rotation button” with any embodiment to render a GUI element in three-dimensional object space and, therefore, fails to describe an element of each of Applicant’s independent claims.

Moreover, Applicant submits that it is well settled that “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); MPEP § 2112 (IV). Even if the “rotation button” in paragraph [0056] and the “adjusting of texture objects” of paragraph [0074] in **Dumesny** could be combined, it would not yield a GUI element rendered in three-dimensional object space. As noted above, paragraph [0056] and FIG. 15A of **Dumesny** describe a “rotation button” outside of the “texture space region” and outside of the “object space region.” Any combination of these regions as described in paragraph [0074], with the “rotation button” outside of either region as described in paragraph [0056] and as shown in FIG. 15A of **Dumesny**, would yield a combined region with the “rotation button” outside of that combined region. Therefore, **Dumesny** neither explicitly nor inherently discloses a GUI element rendered in three-dimensional object space as recited in each of Applicant’s claims 1, 10, and 30, even if there was a suggestion to combine.

Finally, Applicant respectfully submits that **Dumesny** does not enable one skilled in the art to make and use a GUI element rendered in three-dimensional object space. The embodiment mentioned in paragraph [0074] of **Dumesny** is merely speculative. Not only does **Dumesny** fail to suggest using a GUI element rendered in three-dimensional object space, **Dumesny** also does not contain an explanation of how one of ordinary skill in the art could provide a GUI element rendered in three-dimensional object space, even if it were suggested to do so. Thus, **Dumesny** fails to teach one skilled in the art how to make or use a GUI element rendered in three-dimensional object space, as recited in each of the independent claims of the present application.

Dumesny fails to explicitly teach rendering a GUI element in three-dimensional object space. **Dumesny** fails to suggest combining embodiments to render a GUI element in three-dimensional object space. Even if embodiments in **Dumesny** could be combined, that combination neither explicitly nor inherently teaches rendering a GUI element in three-dimensional object space, and does not enable one skilled in the art to do so. For each of these reasons, Applicant respectfully requests reconsideration and withdrawal of this rejection.

None of the other cited references – **Leather**, **Yanof**, **Brown**, or **Shahoian**. – teach or suggest rendering a GUI element in three-dimensional object space. Thus, each of the independent claims 1, 10, and 30 is patentable over all of the cited art. Likewise, because a dependent claim includes all the limitations of the independent claim from which it depends, Applicant asserts that dependent claims 2-9, 11-22, and 31-38 are patentable in light of the cited art.

Applicant's independent claim 23, and claims depending therefrom, are patentable over the combination of **Dumesny** and **Yanof**.

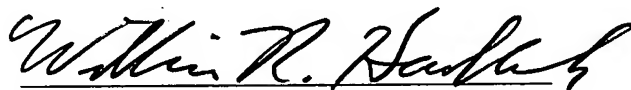
Neither **Dumesny** alone, nor the combination of **Dumesny** and **Yanof**, teach or suggest a method comprising rendering a GUI element in three-dimensional space, as recited in Applicant's claim 23. As discussed above, **Dumesny** fails to teach or suggest rendering a GUI element in three-dimensional space. According to page 7 of the Office action, **Yanof** relates to "a display and adjustment of projections using a transformation matrix. . .". **Yanof** does not teach or suggest at least a method comprising of rendering a GUI element in three-dimensional space. Because these references fail to teach or suggest all the elements of Applicant's claim 23, Applicant respectfully requests reconsideration and withdrawal of this rejection.

None of the other cited references – **Leather**, **Brown**, or **Shahoian**. – teach or suggest rendering a GUI element in three-dimensional object space. Thus, independent claim 23 is patentable over all of the cited art. Likewise, because a dependent claim includes all the limitations of the independent claim from which it depends, Applicant asserts that dependent claims 24-29 are patentable in light of the cited art.

CONCLUSION

In view of the foregoing, Applicant respectfully requests allowance of claims 1-38 in due course. The Examiner is hereby cordially invited to contact Applicant's undersigned representative by telephone at the number listed below to discuss any outstanding issues.

Respectfully submitted,



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